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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,607	07/23/2003	Kang-Seok Cho	1572.1135	7596
21171	7590	06/01/2006	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			SORRELL, ERON J	
			ART UNIT	PAPER NUMBER
			2182	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/624,607	Applicant(s) CHO, KANG-SEOK	
	Examiner Eron J. Sorrell	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/17/06 has been entered.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The applicant has defined the term "machine-readable medium," recited in claim 19, as comprising both statutory and non-statutory embodiments. At paragraph 39 on page 8 of the instant specification, the applicant states that the "machine-readable medium," may comprise propagated signals (i.e. carrier waves, etc.). These types of propagated signals do not fall into any

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of the statutory categories listed above (see the Interim Guidelines for Patent Subject Matter Eligibility Annex IV (c)). The Examiner suggests amending the claims to recite "a machine-readable *storage* medium" to overcome this type of rejection (emphasis added).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-11, 14-16, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al. (U.S. Patent No. 6,279,056) in view of Shen (U.S. Patent No. 6,414,675).

5. Referring to claim 1, Jacobs teaches a portable computer (figure 6), comprising:

a power switch (see lines 1-5 of column 4);

an optical device drive (see lines 36-53 of column 4);

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an audio signal processing unit processing the audio data of a disk inserted into the optical device drive (see lines 53-65 of column 3); and

wherein the audio signal processing unit is supplied with assistant power while system power is turned off (see lines 36-51 of column 4), and

wherein the audio signal processing unit controls the optical device drive based on selections inputted using the selection buttons (see lines 1-25 of column 6).

Jacobs fails to teach an inputting comprising a touch pad and a plurality of touch pad selection buttons unit for inputting movement and selection of a pointing cursor when the power switch is in an "ON" state wherein the inputting unit have selection inputting functions used to control a plurality of operations of the optical device drive when the power switch is in an "OFF" state,

Shen teaches an inputting unit comprising a touch pad (see figure 3); and a plurality selection buttons unit for inputting movement and selection of a pointing cursor when the power switch is in an "ON" state (see lines 42-50 of column 4), wherein the inputting unit have selection inputting functions used to control a plurality of operations of the optical device

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drive when the power switch is in an "OFF" state (see lines 31-50 of column 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Jacobs with the above teachings of Shen in order to preserve battery life as suggested by Shen (see lines 51-62 of column 1).

The combination of Jacobs and Shen fails to teach the plurality of selection buttons are associated with the touch pad, however Jacobs does teach the selection buttons can be located anywhere on the computer system (see lines 18-22 of column 6), and modifying the combination of Jacobs and Shen to arrive at the applicant's claimed invention would only require a mere relocation of parts, which has been found to be an obvious modification See *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950); *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975). One of ordinary skill in the art would have been motivated to make such modification because Shen suggests this relocation and it would reduce the total number of buttons in the system.

6. Referring to claim 2, Shen teaches a plurality of inputting button switches generating selection signals when the respective

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selection buttons are pressed (see lines 5-13 of column 3) and the touch pad is provided with a touch pad IC unit generating a pointing signal in response to the selection signal as generated by the plurality of inputting button switches (see lines 18-26 of column 4). It would have been obvious to one of ordinary skill in the art to modify the teachings of Jacobs with the above teachings of Shen for the same reasons as mentioned above.

7. Referring to claim 3, Jacobs teaches supplying selection signals based on an "ON" or "OFF" signal of the "main power" to the audio signal processing unit (see col. 2, lines 7-21).

8. Referring to claim 4, Jacobs teaches supplying a selection signal generated in the input buttons based on the "ON" signal of the power switch (see "power switch 58" col. 4, lines 36-42).

However, Jacobs et al. fails to teach a touch pad provided with a touch pad IC unit generating a pointing signal in response to the selection signal as generated by the plurality of inputting button switches.

Shen teaches a personal computer having a touch pad provided with an IC unit generating a pointing signal in response (see lines 18-26 of column 4). At the time of the invention, one of ordinary skill in the art would have been

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motivated to combine the cited disclosures, for the reasons stated in the rejection of claim 1.

9. Referring to claim 5, Jacobs et al. teaches supplying a selection signal generated in the input buttons based on the ('OFF' signal of the power switch (see "audio CD mode" and "power switch 58" col. 4, lines 59-42).

10. As for claim 6, Jacobs teaches the power is supplied to "unpowered" devices by a microcomputer in the computer system devices based on the "ON" or "OFF" signals of the power switch (see "audio CD mode" and selectively powering and initializing hardware (see col. 9, lines 53-55 col. 10, lines 4-7).

11. Referring to claim 7, Jacobs teaches supplying assistant power to the audio processing unit while system power is turned off (see lines 36-51 of column 4).

12. Referring to apparatus claim 8, method claim 14, and machine-readable claim 19, Jacobs teaches a computer having an optical device driver, comprising:

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a power switch to enable or disable system power (see lines 1-5 of column 4);

a plurality of input button switches to generate a signal based on a user input (see lines 1-25 of column 6);

Jacobs fails to teach the input buttons are associated with a touch pad and a touch pad control unit to control movement of a pointing cursor and a bus switching unit to supply the signal to the optical device driver to control an optical device if the system power is disabled and to supply the signal to the touch pad control unit to control a pointing cursor if the system power is enabled.

Shen teaches an inputting unit comprising a touch pad (see figure 3); and a plurality selection buttons unit for inputting movement and a bus switching unit to supply the signal to the optical device driver to control an optical device if the system power is disabled and to supply the signal to the touch pad control unit to control a pointing cursor if the system power is enabled (see lines 42-50 of column 4).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Jacobs with the above teachings of Shen in order to preserve battery life as suggested by Shen (see lines 51-62 of column 1).

The combination of Jacobs and Shen fails to teach the plurality of selection buttons are associated with the touch pad, however Jacobs does teach the selection buttons can be located anywhere on the computer system (see lines 18-22 of column 6), and modifying the combination of Jacobs and Shen to arrive at the applicant's claimed invention would only require a mere relocation of parts, which has been found to be an obvious modification See *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950); *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975). One of ordinary skill in the art would have been motivated to make such modification because Shen suggests this relocation and it would reduce the total number of buttons in the system.

13. Referring to claim 9, Jacobs teaches a plurality of input buttons (see Figure 5).

14. Referring to apparatus claim 10, method claim 15, and machine-readable medium claim 20, Jacobs teaches controlling a CD-ROM drive that plays audio compact discs (CDs) (see col. 9, lines 21-24).

15. Referring to apparatus claim 11, method claim 16, and machine readable medium claim 21, Jacobs discloses input of

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playback instructions for the audio CDs when a signal is supplied to the optical device driver (see col. 7, lines 39-41).

16. Claims 12,13,17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs in view of Shen as applied to claims 1,8, and 14 above, and further in view of Iwata (U.S. Patent No. 6,865,621).

17. Referring to apparatus claim 12 and method claim 17 the combination of Jacobs and Shen fails to explicitly teach a DVD drive that plays digital versatile discs (DVDs).

Iwata teaches in an analogous system, a portable computer outfitted with a DVD/CD drive (see item 32 in figure 3).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Jacobs and Shen with the above teachings of Iwata in order to give the user more media playback options.

18. Referring to apparatus claim 13 and method claim 18, Jacobs teaches input of playback instructions for the audio CDs when a signal is supplied to the optical device driver (see col. 7, lines 39-41). Nonetheless, the combination of Jacobs and Shen

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fails to explicitly teach a DVD drive that plays digital versatile discs (DVDs).

Iwata teaches in an analogous system, a portable computer outfitted with a DVD/CD drive (see item 32 in figure 3).

19. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Jacobs and Shen with the above teachings of Iwata in order to give the user more media playback options.

Response to Arguments

20. Applicant's arguments filed 2/17/06 have been fully considered but they are not persuasive. The applicant argues:

1) the combination of Jacobs and Shen fails to teach touchpad selection buttons used to (1) input movement and selection of a pointing cursor when the power is in an "ON" state (2) to control a plurality of operations of the optical device drive when the power switch is in an "OFF" state (see 5th full paragraph on page 6);

2) the combination of Jacobs and Shen fails to teach "a plurality of touch pad input button switches to generate a signal based on a user input;... a bus switching unit to supply the signal to the optical device driver to control an optical device if the system power is disabled and to supply the signal

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to the touch pad control unit to control a pointing cursor if the system power is enabled.

21. As per argument 1, the Examiner disagrees. Shen teaches selection buttons used to control a plurality of operations of the optical device drive when the power switch is in an "OFF" state (see lines 31-50 of column 1). Shen further teaches that these same selection buttons are used ^{to} "select, enter, and manipulate data" on the display. The combination of Jacobs and Shen fails to explicitly state the selection buttons are associated with the touchpad, however Shen suggests these selection buttons can be anywhere on the system () and to modify the combination to arrive at the applicant's claimed invention would only require a mere relocation of parts which has been found to be an obvious modification (see rejection above).

22. As per argument 2, the Examiner disagrees. As highlighted above, the combination of Jacobs and Shen teaches the plurality of touch pad input switches that generate a signal based on user input. Shen further teaches a bus switching unit to supply the signal to the optical device driver to control an optical device if the system power is disabled and to supply the signal to the touch pad control unit to control a pointing cursor if the

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system power is enabled (see lines 26-37 of column 3, wherein Shen teaches the embedded controller acts as a switch to enable the processor and display when the power is ON and to enable control of the display using the selection buttons).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J. Sorrell whose telephone number is 571 272-4160. The examiner can normally be reached on Monday-Friday 8:00AM - 4:30PM.

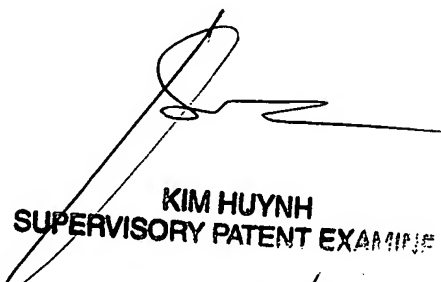
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EJS

May 23, 2006



KIM HUYNH
SUPERVISORY PATENT EXAMINER
5/24/06